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Title *A Study of Interference Suppression in Adaptive Arrays*

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Abstract

Since 1960s, adaptive arrays and their role in suppression of interference has been one of the frontier areas of research. Many techniques and designs has been proposed and implemented. In the present work, two classical techniques, viz. retrodirective eigenvector beam approach and steady-state analysis have been studied in detail. Computer codes have been developed for both the approaches in order to obtain the adapted pattern of a linear array in different environments. Various distributions of interfering signals such as separated narrow-band jammers, jammers with bandwidth, low-power jammers, continuously distributed jammers have been considered for the computation. The effects of various parameters such as source power level, source location with respect to the quiescent beam pattern, source bandwidth and continuous source distributions have been analysed. The computed results have been validated with those in the literature.